Kingbright®

8mm BLINKING LED LAMPS

L-796BI HIGH EFFICIENCY RED

L-796BSR SUPER BRIGHT RED

L-796BG GREEN

L-796BY YELLOW

Features

- 8mm DIAMETER BIG LAMP WITH BULIT-IN BLINKING IC.
- OPERATION VOLTAGE FROM 3.5V to 13V.
- BLINKING FREQUENCY FROM 2.5Hz to 1.5Hz.

Description

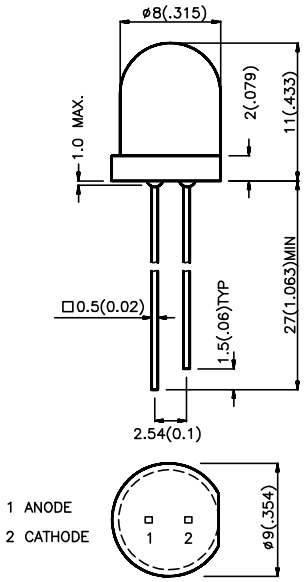
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ VF=9V		Viewing Angle
			Min.	Max.	**2q1/2**
L-796BID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	20	100	60°
L-796BGD	GREEN (GaP)	GREEN DIFFUSED	20	70	60°
L-796BYD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	20	70	60°
L-796BSRD-B	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	100	400	60°
L-796BSRC-B	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	500	1000	40°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

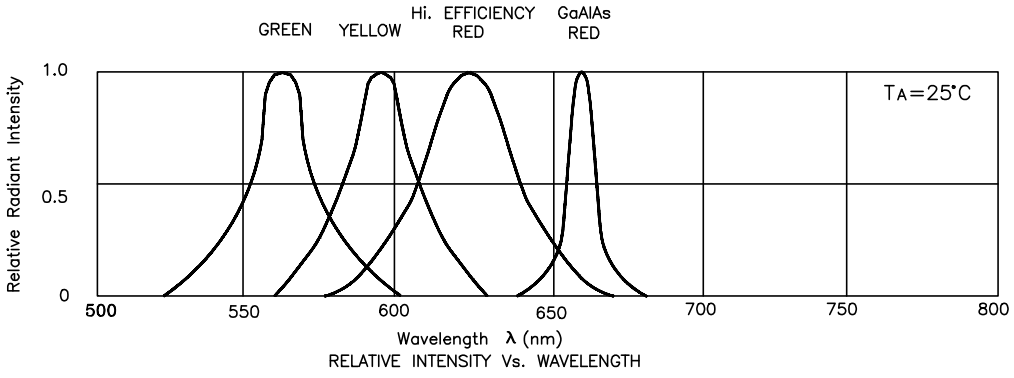
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Min.	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green Yellow Super Bright Red		625 565 590 660		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green Yellow Super Bright Red		45 30 35 20		nm	IF=20mA
V_F	Forward Voltage	All	3.5	9-12	13.0	V	Min. IF=6mA Typ. IF=38-56mA Max.IF=70mA
I_{SON}	Supply Current	All		6 -70		mA	
f	Blink Frequency	All		2.5-1.5		Hz	

Absolute Maximum Ratings at T_A=25°C

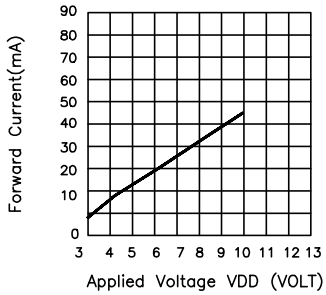
Parameter	High Efficiency Red	Green	Yellow	Super Bright Red	Units
Power dissipation	200	200	200	200	mW
DC Forward Current	38-56	38-56	38-56	38-56	mA
Reverse Voltage	0.5	0.5	0.5	0.5	V
Operating Temperature	-40°C To +70°C				
Storage Temperature	-50°C To +100°C				
Lead Soldering Temperature [1]	260°C For 5 Seconds				

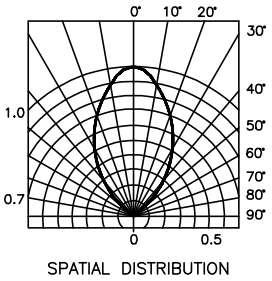
Note:
1. 4mm below package base.

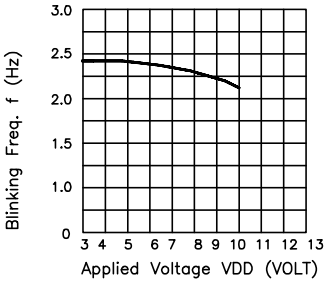


RELATIVE INTENSITY Vs. WAVELENGTH

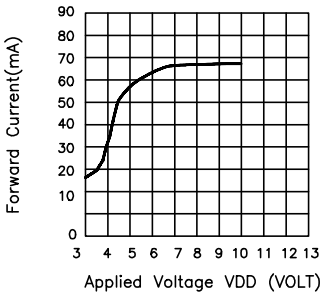
High Efficiency Red L-796BID

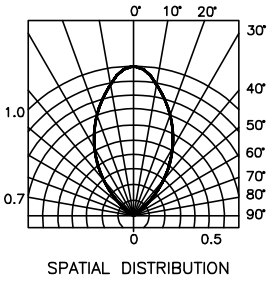


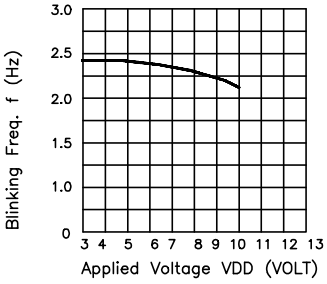




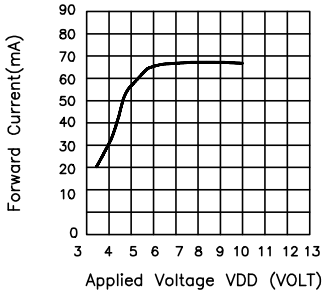
Green L-796BGD

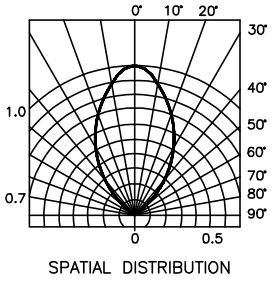


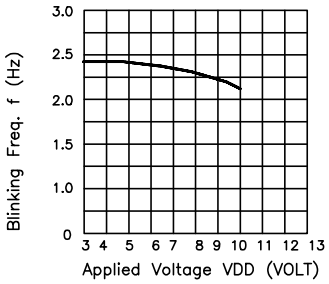
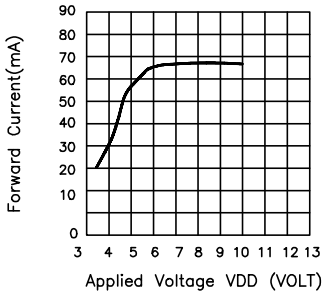
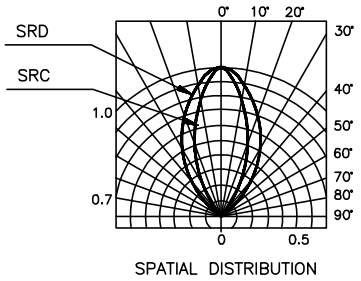
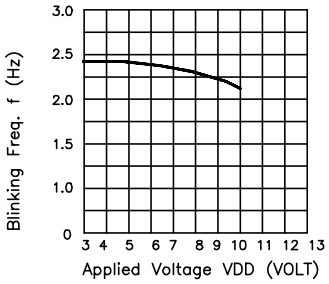




Yellow L-796BYD







Super Bright Red L-796BSRD-B,L-796BSRC-B